

# Report to the Legislature on Accelerating Geologic Carbon Sequestration Strategies (AB1925 Report)

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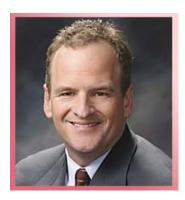
## AB1925 aims to accelerate the State's readiness for geologic carbon storage

- Passed unanimously in August 2006
- Independent of mandatory greenhouse gas reduction bill (AB 32)
- Requires the Energy Commission, with the Dept of Conservation, to prepare a report containing:

"recommendations for how the state can develop parameters to accelerate the adoption of costeffective geologic sequestration strategies for the long-term management of industrial carbon dioxide"

Report to be included in the 2007 IEPR

Due to Legislature: November 1, 2007

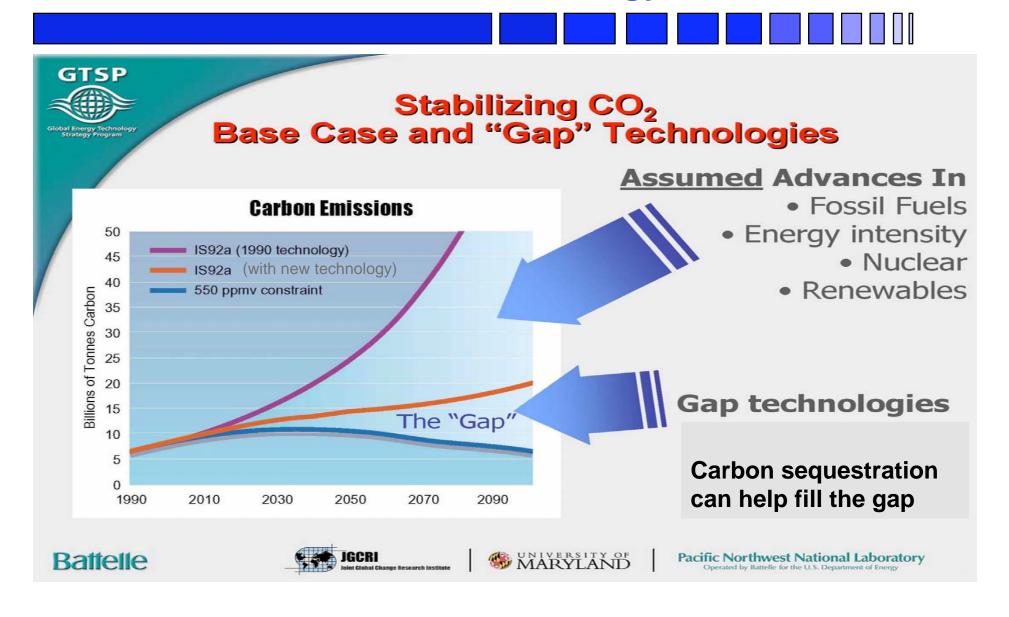


Sam Blakeslee



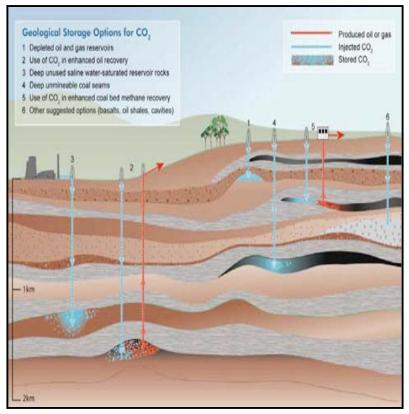


## Holding the line on global carbon emissions will require more than new energy technology





#### What are the components of geologic Carbon Capture and Storage (CCS)?



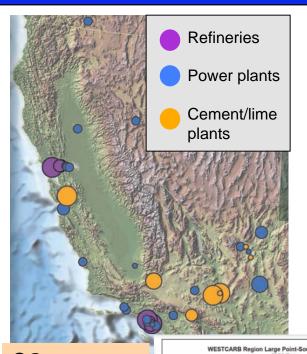
"Special Report on CCS," IPCC 2005

- CO<sub>2</sub> is "captured" out of emissions from a power plant or industrial facility
- The separated CO<sub>2</sub> is transported to a storage site
- CO<sub>2</sub> is injected as a supercritical (liquid-like) fluid for storage in deep geological formations:
  - Saline Formations
  - Depleted Oil & Gas fields
  - Unmineable Coal Seams





#### California is well-positioned to deploy geologic CCS



Substantial CO<sub>2</sub> storage capacity

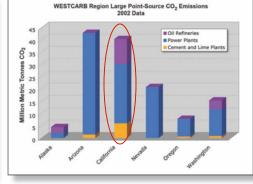
Large point sources

Technical capability

Market interest







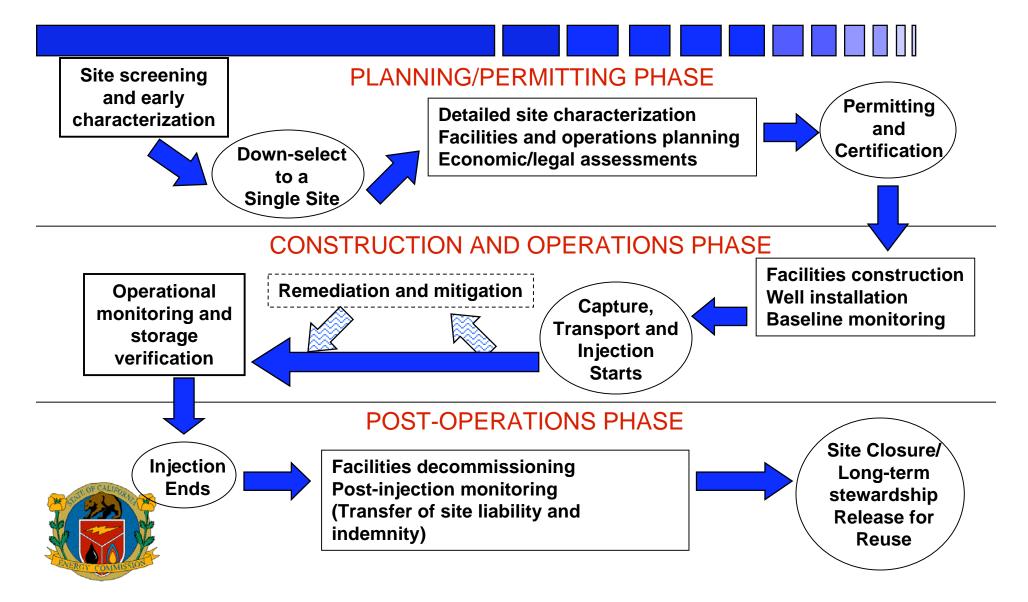


All figures from "Carbon Sequestration Atlas of the United States and Canada," DOE 2007

**Saline formations** 



#### AB 1925 Report addresses all phases and components of CCS deployment





## Aligning AB1925 with pace of international R&D requires two phases

- AB1925 Report-November 2007 will include:
  - State-of-the-art assessments by international experts
  - Phase I and early Phase II WESTCARB results pertaining to California;
  - Identification of S&T gaps that can be addressed through further R&D
  - Identification of social, regulatory or legal issues that need to be studied and addressed
- AB1925 Report-proposed 2010 will include:
  - Results and lessons-learned from WESTCARB Phase II pilots and early Phase III
  - CGS study of southern California storage potential
  - R&D undertaken to fill gaps identified in 2007 report





#### Roles of state agencies have been defined and agreed on

#### Energy Commission

- Obtain and evaluate input from technical experts
- Provide opportunities for stakeholder and public input
- Integrate input and produce report
- Include report in 2007 IEPR
- California Geological Survey
  - Determine storage potential in CA formations
  - Identify future data and resource needs
- Division of Oil, Gas, and Geothermal Resources
  - Evaluate regulatory implementation issues
  - Identify regulatory gaps and resource needs





# AB1925 Report process engages experts, agencies, stakeholders and the public

- Other government agencies actively engaged:
  - CA Dept of Conservation
    - » Division of Oil, Gas, and Geothermal Resources (DOGGR)
    - » California Geological Survey
    - » Meeting held with Director Luther
  - CA Air Resources Board
  - EPA Region 9
- Working team welcomes and is receiving input from various NGOs (e.g., NRDC, GWPC, WRI)
- Impartial experts contracted to provide white papers on topics called out in AB1925



#### **Major Milestones and Target Dates**

Milestone	Target Completion Date
Finalize selection of and agreements with expert authors	April
IEPR Clean Coal and Carbon Sequestration Workshop	May 29
Commission staff scoping workshop	June 28
Receipt of all white papers from experts	July
Receipt of expert reviews of white papers	August
First draft of complete report and IEPR section	September
Public workshop	October
Final report submitted to Legislature	November 1